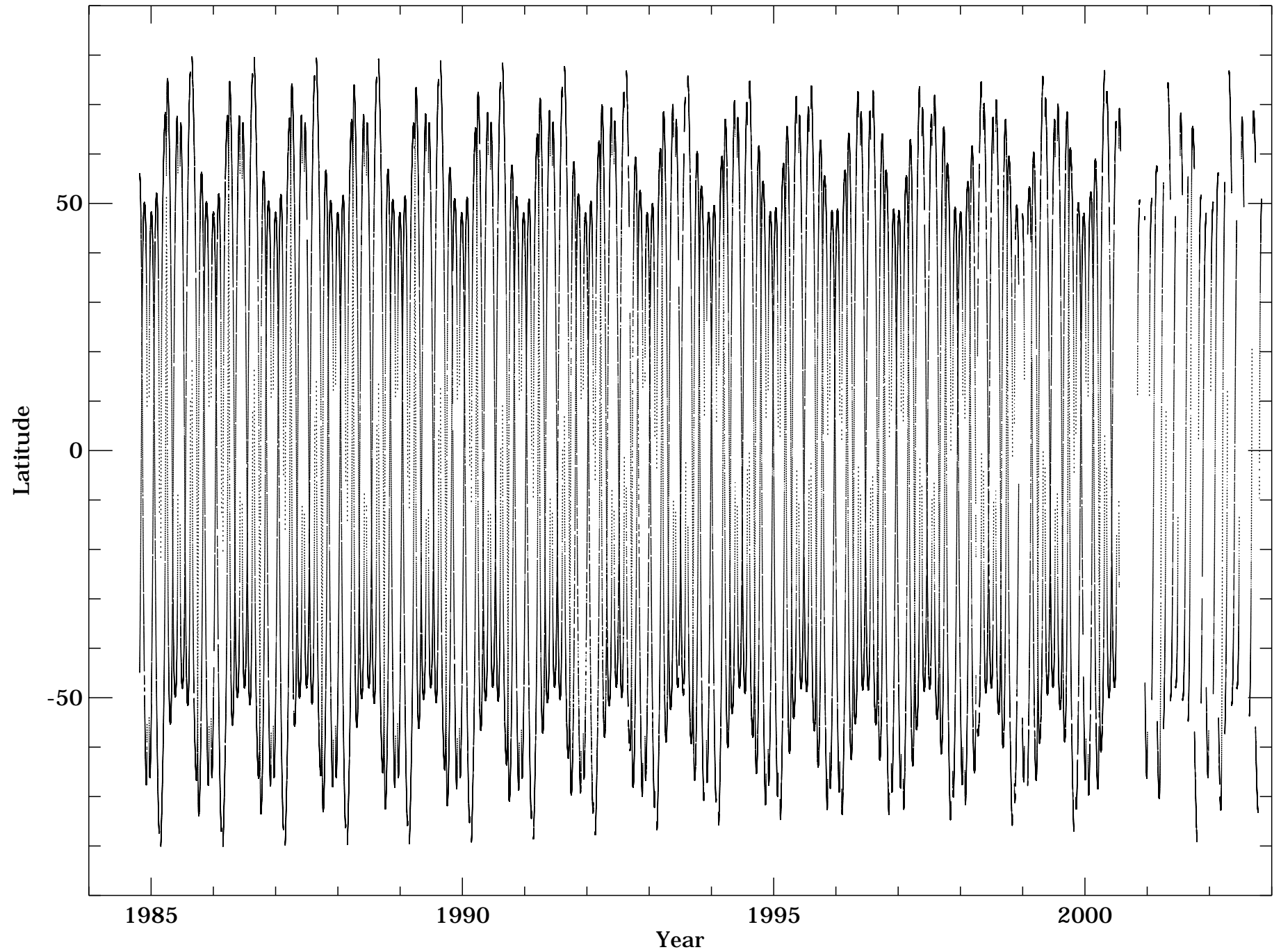

SAGE II Status

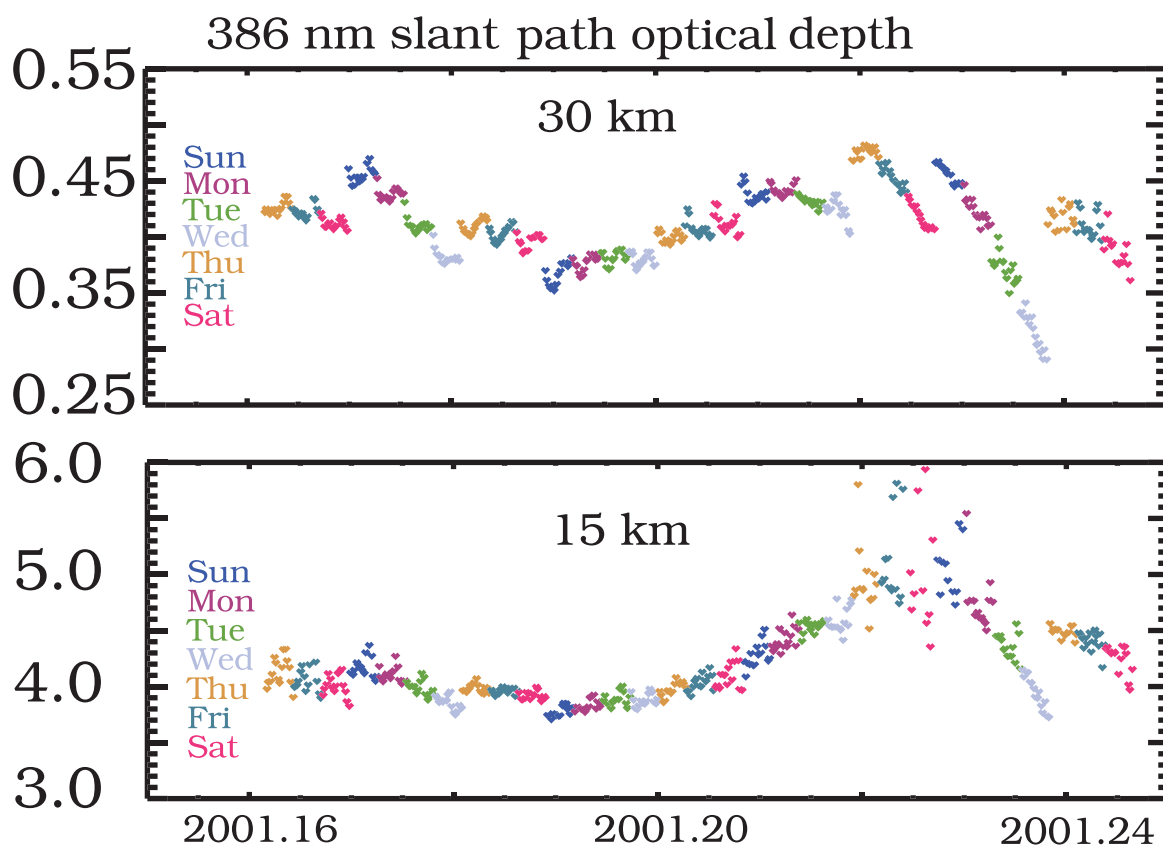
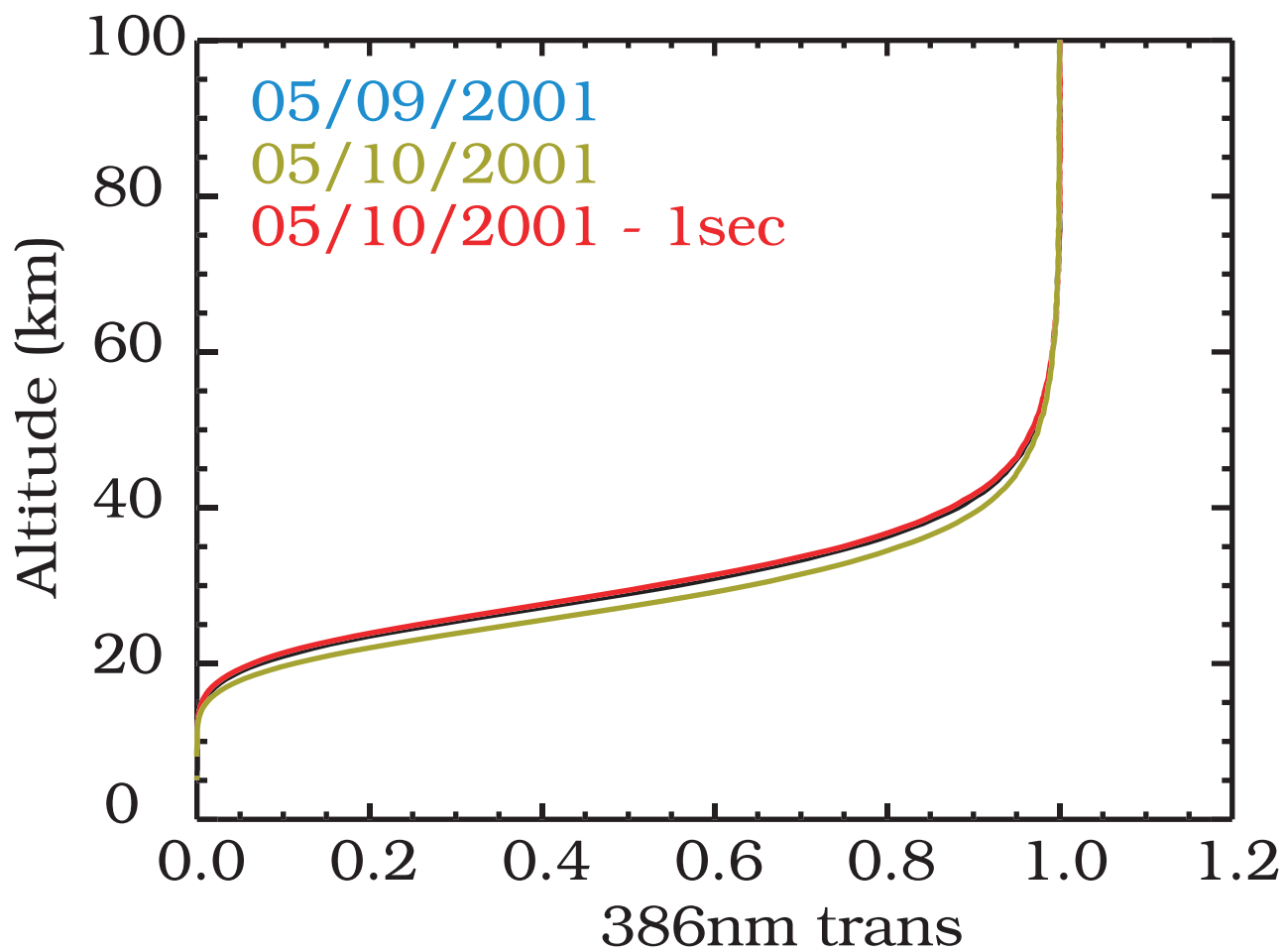
Joseph M. Zawodny

ERBS Operational Status

- ERBS continues to operate nominally
- SAGE II is still operating after 18 ½ years
- Duty cycle reduced to 50% after gimbal failure in mid-2000
- Version 6.1 data released up through mid-2000
- Change in orbital ephemeris software introduced artifacts beginning in early-2000
- New ephemeris from GSFC being evaluated
- Version 6.2 with new H₂O awaiting new ephem.

Location of SAGE II events





Exo-atmospheric transmission

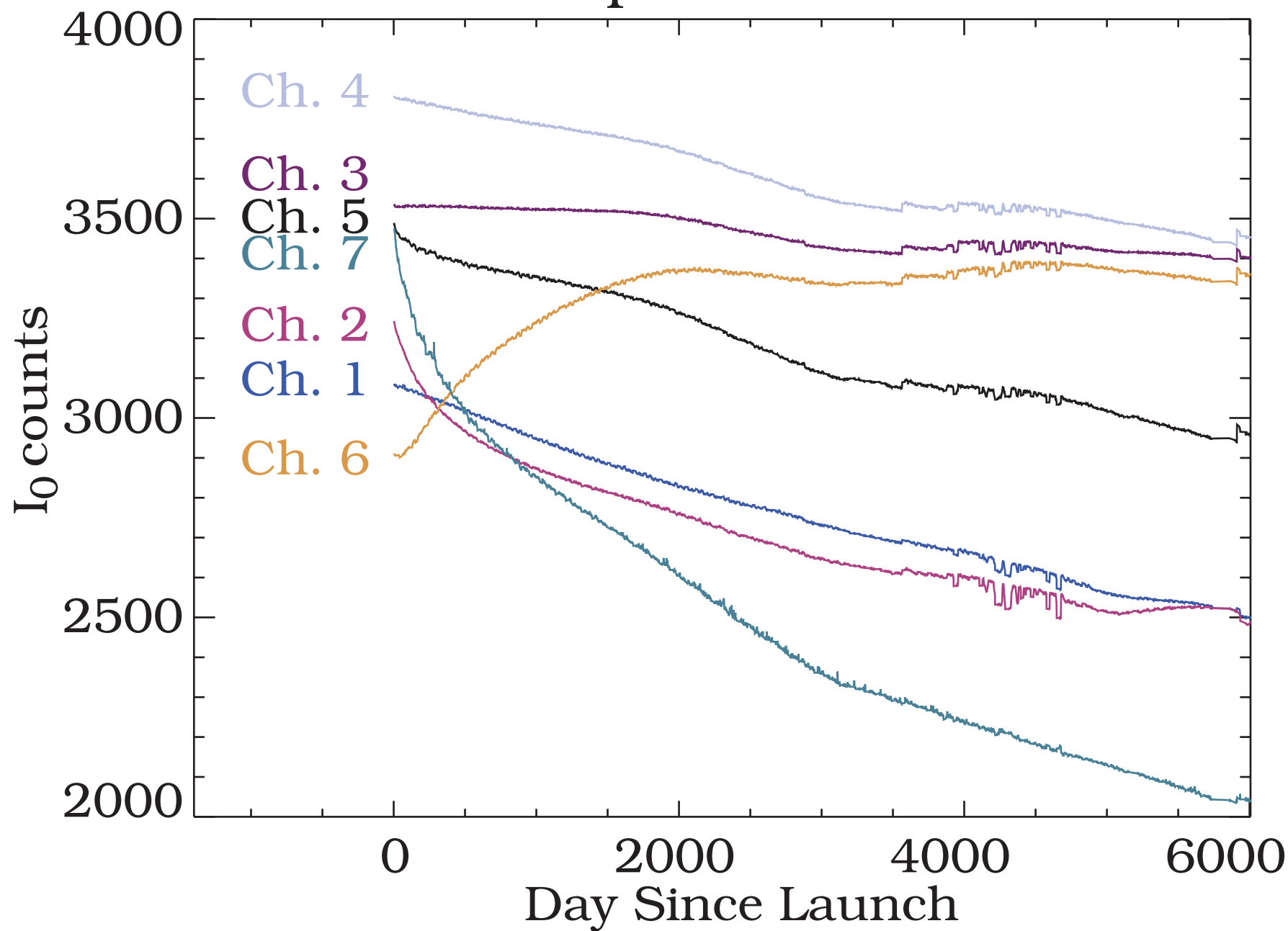


Fig.1(a) SAGE II version 6.1

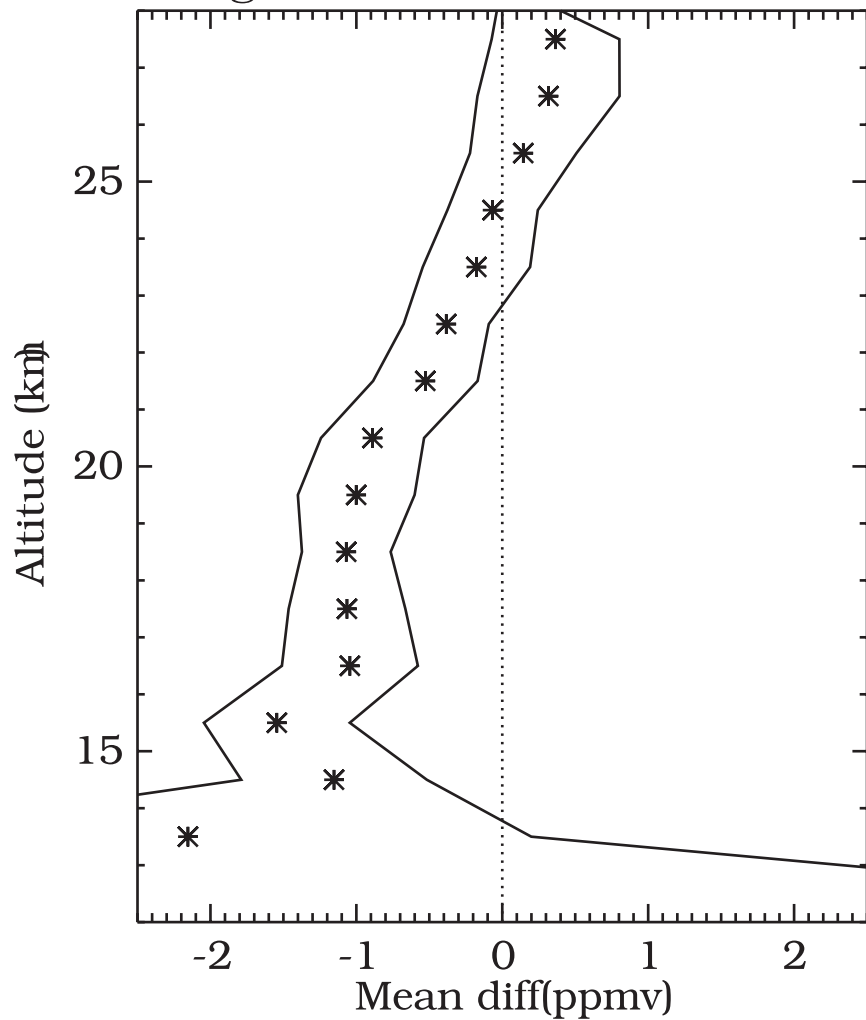
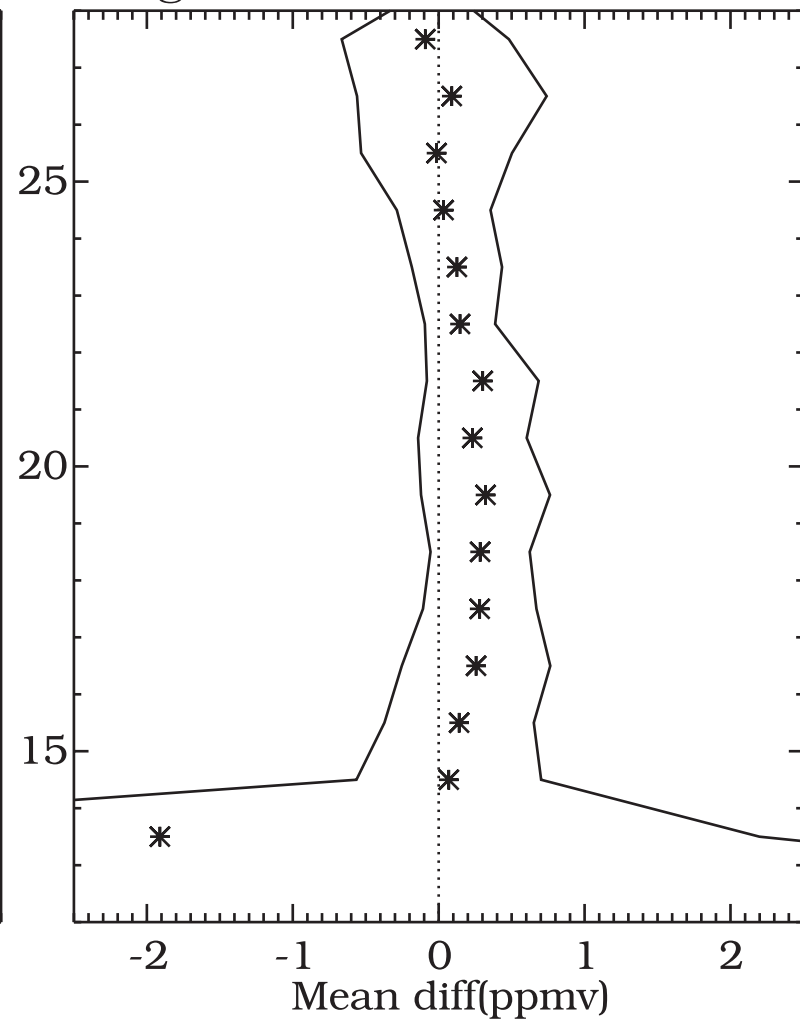
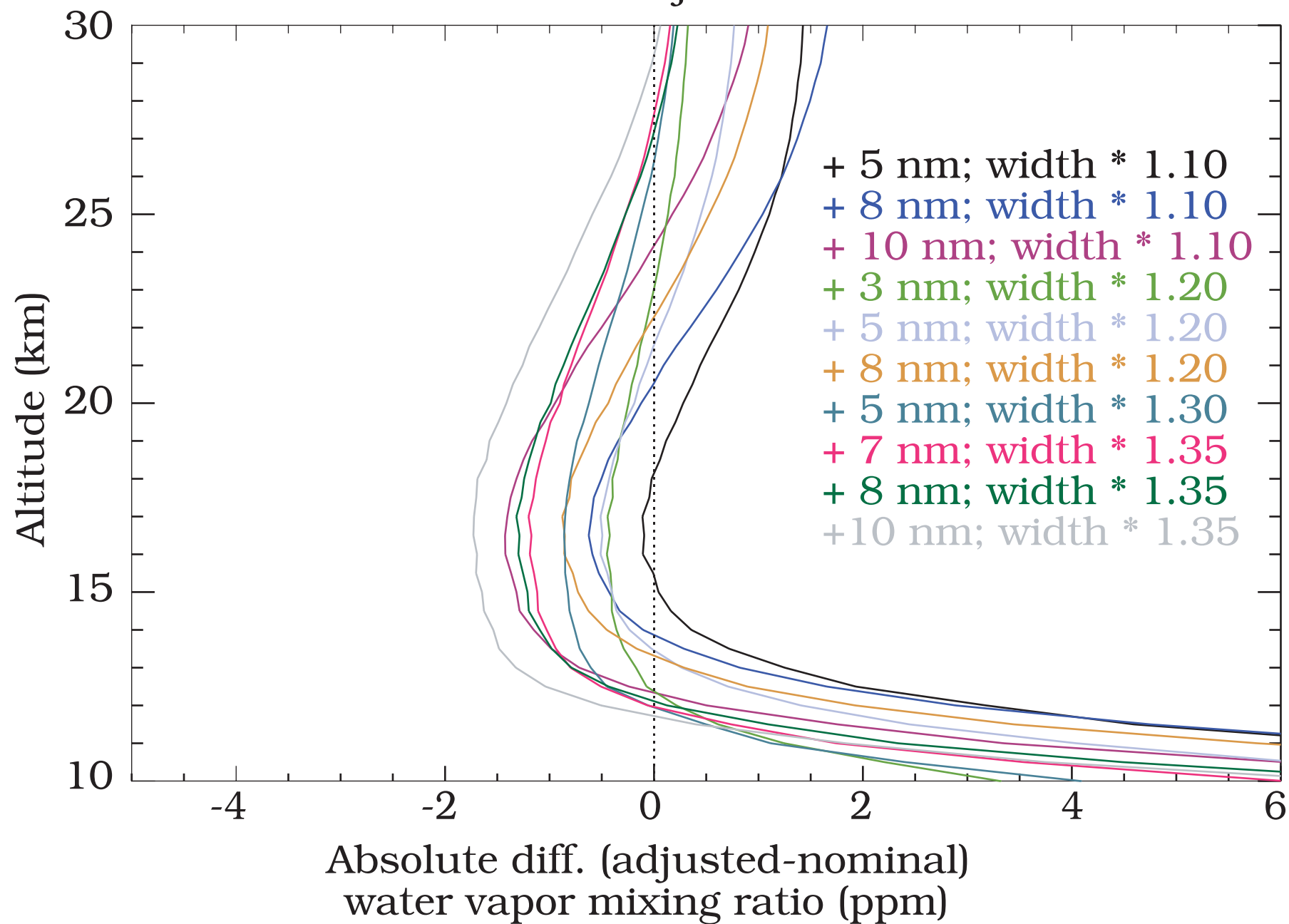


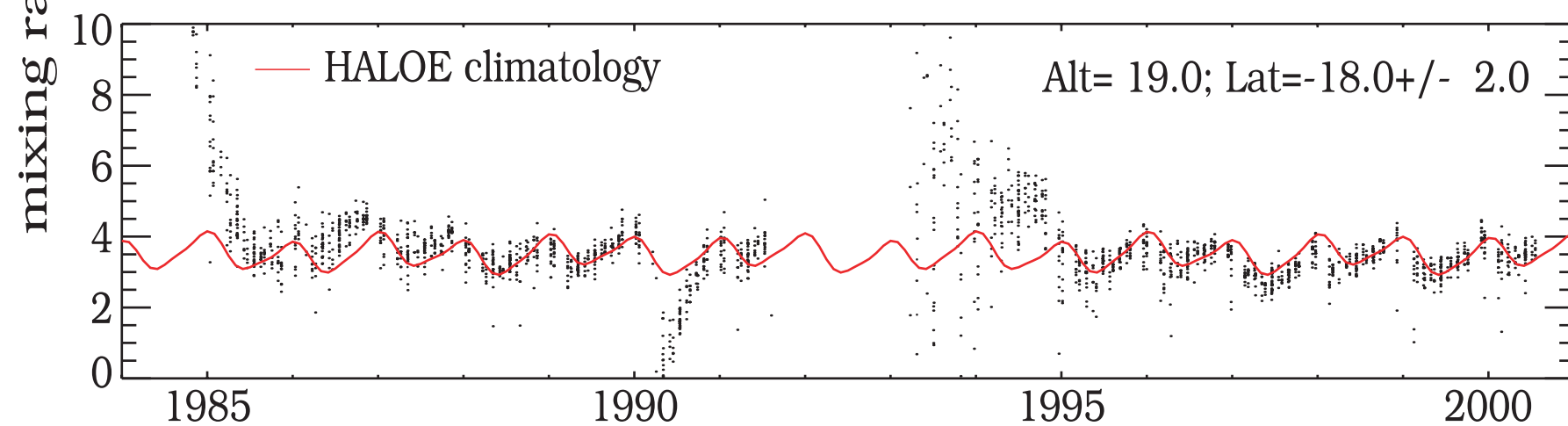
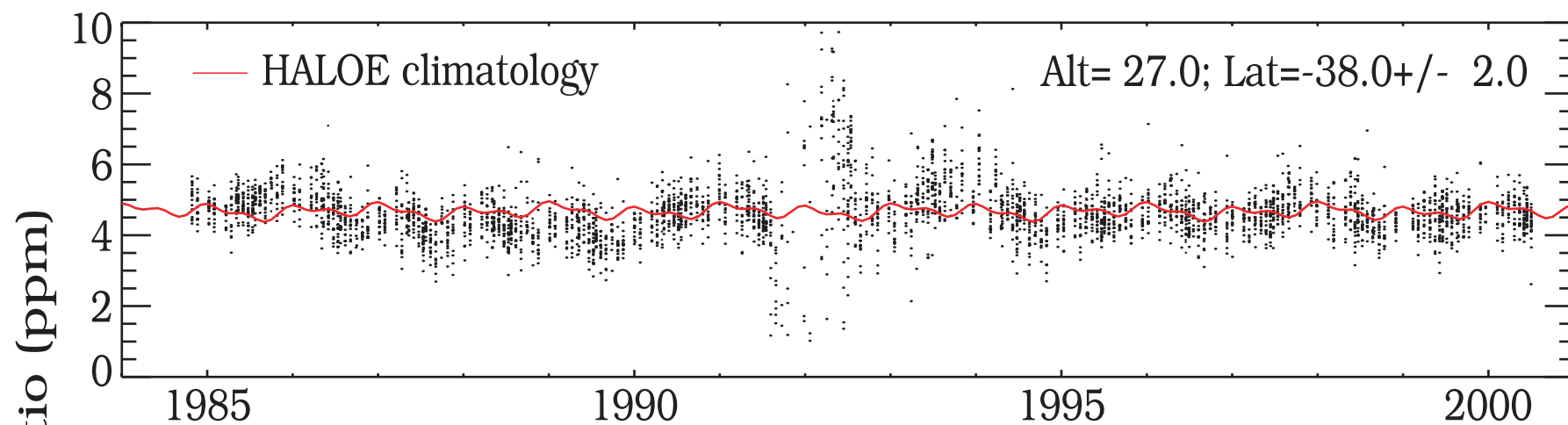
Fig.1(b) SAGE II version 6.2



Pre-Pinatubo comparison: SAGE II versus Frost Point over Boulder, CO, for 29 coincident pairs of measurements from 1989 and 1990.

Modtran model of adjustment to channel 2





Future Work

- SAM II and SAGE I being reprocessed with V6 transmission algorithm
- Evaluating the Abel transform
- Packet-by-packet species separation
 - Improved redistribution of measurement errors
 - Natural isolation of spatial inhomogeneity
- Continuing 3D inversion efforts
 - Not continuing development of Tomography
 - Using a-priori spatial constraints from dynamics (PV-T) for ozone in the lower stratosphere, microphysics (T and or wave activity) for aerosols/PSCs, or photochemical models for NO₂